

NASA TECH BRIEF



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Vibration Damping Composition Has Flush-Away Feature

The problem:

In vibration testing of critical components, the introduction of harmonic or resonant frequencies in structures that support the item under test tends to degrade and distort instrument response.

The solution:

A vibration damping compound that is readily applied either internally or externally to support structures in such a manner that essentially all resonance frequencies in such structures are nulled.

How it's done:

The damping composition is made up of 0.065 pound of sodium chromate in 5.0 gallons of commercial grade distilled water, one part of which is mixed with two parts of dry cornstarch. Bulk is supplied by filling the void where damping is to be achieved with polyethylene pellets of approximately 0.125 inch in diameter. The liquid mix is then poured into the void until filled.

Notes:

1. The main feature of this damping composition is the ability to remove it with a flush of plain tap water. It does not adhere or coagulate in the manner typified by polyurethane and other popular dampeners.
2. Inquiries concerning this invention may be directed to:

Technology Utilization Officer
Marshall Space Flight Center
Huntsville, Alabama 35812
Reference: B67-10432

Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D. C. 20546.

Source: Jack F. Fellin
of North American Aviation, Inc.
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(MFS-597)

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